

GSFC MIST Contract

Task Order Statement of Work (SOW) – Extension of Reduced Support

Date: February 4, 2019

Task Name: MOMA Contamination Control and Planetary Protection

Task No. / Mod: 58 / 9

Task Monitor (TM) : **REDACTED**

Contract number: NNG15CR64C

Contract SOW:

I. Scope

a. Background

The Mars Organic Molecule Analyzer (MOMA) instrument is a combined Gas Chromatograph/Mass Spectrometer (GC/MS) payload on a landed Mars rover being developed by ESA and is part of the ExoMars program. MOMA is a joint collaboration between the US and the Max Planck Institute for Solar System Research (MPS) in Germany, with MPS as the lead institution responsible for delivering MOMA to the European Space Agency. The US MOMA flight hardware was delivered to Thales Alenia Space – Italy (TAS-I) in 2018, with launch currently scheduled in 2020.

The task is to implement a contamination control and planetary protection program for the development and assembly of the MOMA-MS flight spare instrument. Participate in the certification of aseptic clean facilities for instrument assembly. Oversight of the implementation of this program will be accomplished by monitoring for cleanliness by standard methods and bioburden assays.

b. Summary of work

1. The contractor shall support implementation of contamination control plans and procedures to meet the cleanliness requirements of the MOMA-MS for assembly of the flight spare model.
2. The contractor shall procure the equipment necessary for providing bioburden assay measurements, as directed by the Task Monitor.
3. The contractor shall monitor assembly, integration and test areas for cleanliness and bioburden, and provide monthly reports.

II. Period of Performance

The period during which the work for this task shall be performed through 4/30/2020

III. Subtask Description

Not Applicable

IV. Deliverables/Schedules/Milestones

1. Performance Reports – monthly
2. Facility Certification Reports - monthly
3. Hardware Cleanliness Reports – as needed
4. End-of-task Report - at end of task

V. Management Approach

a. Staff Allocation, Expertise, and Skill Mix

The contractor shall staff this work item with the appropriate skill mix and staffing level for the work.

b. Configuration Management

Systems and documents will be covered under the Project Configuration Management Plan.

c. Facilities

This work will be performed on-site at the Goddard Space Flight Center; it is contractor's responsibility to provide the appropriate IT hardware and software.

d. Risk Management and Best Practices

The contractor shall manage schedule, cost, and technical risk through monitoring and reporting of progress and performance metrics, identifying issues well in advance of negative consequences, recommending corrective action to the TM, and implementing corrective actions with the compliance of the TM.

e. Performance Metrics

The work performed for this task will be evaluated by the TM based on the technical merit. The TM shall develop detailed performance metrics that shall reflect the contractor's performance in meeting research analysis, specific mission requirements, deliverables and delivery schedule, and the contractor's cost. Technical evaluation of the task performance is a

subjective combination of performance metrics, technical quality of deliverables, cost control, significant events, innovations and meeting requirements set forth in the SOW.

The metrics below shall be used to evaluate contractor's performance:

1. Percent completion of subtask
2. Planned versus actual
3. Delivery dates

f. Government Furnished Facilities, Equipment, Software and Other Resources

The Government will provide account and passwords to access the government's network. It shall be the contractor's responsibility to complete any GSFC required security-related training courses.

g. Quality Assurance Requirements

The contractor providing technical services shall comply with all CMMI Level 2 processes established for the Project and deliverable products. Applicable requirements include, but not limited to:

1. NPR 7120.5D NASA Space Flight Program and Project Management Requirements
2. NPR 7123.1A NASA Systems Engineering Processes and Requirements
3. GPR 7120.1C Project Management
4. GPR 7120.5A Systems Engineering

VI. ODC (Travel and Procurement)

- A. Procurement of supplies to stock the Planetary Protection laboratory and provide bioassays.

VII. Work Location

This work shall be performed primarily on-site at the Goddard Space Flight Center, but the contractor may be required to perform some work at the contractor's facility.

VIII. Reporting Requirements

a. Monthly performance report

The contractor shall provide monthly technical and schedule progress reporting to adequately describe the activities of the contractor team to the TM. The contractor shall provide monthly cost reporting in accordance with the WBS. The contractor, including subcontractors, shall be available to attend monthly status meetings.

The contractor shall also support the TM in the preparation of status reviews for internal and external funding agencies. The contractor shall comply with any and all additional requests for status meetings and reports.

IX. Security Requirements

The contractor shall comply with Information Technology Security procedures and requirements as defined by NPG 2810.1A in the performance of this task. In addition, the contractor shall comply with all applicable federal rules and regulations and agency directives. There will not be any handling of classified data.

X. Data Rights

This SOW shall adhere to the following Data Rights clause, as stated in this contract: "the default Data Rights clause under this contract is FAR 52.227-14 RIGHTS IN DATA-GENERAL as modified by NASA FAR Supplement 1852.227-14-Alternate II and Alternate III and GSFC 52.227-90. Any exceptions to this clause will be covered by FAR 52.227-17 RIGHTS IN DATA-SPECIAL WORKS as modified by NASA FAR Supplement 1852.227-17, and, if applicable, GSFC 52-227.93."

XI. Applicable Documents

In the performance of this task, the contractor shall comply with the following documents:

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| 1. NPR 7150.2A | NASA Software Engineering Requirements |
| 2. GPR 7150 | Goddard Software Engineering Requirements |
| 3. NASA/SP-2007-6105 | NASA Systems Engineering Handbook |

XII. References